

REMARKS

Claims 12 and 14-16 are pending. Claim 12 has been amended. Claim 13 has been cancelled. Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Applicants appreciate the courtesies extended to Applicants' representative by the Examiner during the June 6, 2006 telephone interview. During the Interview, the Examiner agreed that the Yasukazu reference (of record) did not teach that the separation layer is formed with the same thickness as a width of the nano-gap, and deposited with the same thickness on a surface and a sidewall of the first electrode, and the substrate. In view of the Examiner's indication, Applicants have amended claim 12 to recite this feature.

Additionally, Applicants' representative and the Examiner discussed claim 15 and the Applicants submitted that the feature of claim 15, namely that the second electrode is formed with a thickness thinner than that of the first electrode is not a matter of routine experimentation as alleged previously by the Examiner. To support Applicants position, and as suggested by the Examiner, Applicants respectfully submit that the second electrode, for example electrode 54, is thinner than the first electrode 52, for example, is to prevent welding or joining of the nano-gap. Specifically, for example, a separation layer 53 is formed over the 1st electrode 52 and then, some portion of the separation layer on the top surface of the first electrode is removed. After the removal, the 2nd electrode material is deposited on the separation layer 53. At this time, the thickness of the separation layer may be approximately in the range of 1 nm to 10 nm and thereby becomes substantially thinner than the 1st electrode of which thickness may be in the range of 50nm to 300nm. However, the first electrode should be electronically isolated from the second electrode. Accordingly, if the 2nd electrode is thicker than or same as that of the first electrode, it is possible that the electrode materials on the 1st and 2nd electrode could be welded (joined) and thereby nano-gap technology, which is the purpose of invention, can not be formed or reduce the stability of electronic elements."

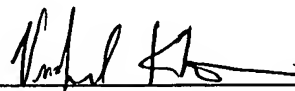
Neither Yasukazu or Tsai individually or in combination suggest this feature and benefit of the present invention.

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

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Date: June 16, 2006